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10/068,295	02/05/2002	Oscar R. Mitchell	LYRN004US0	9657

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EXAMINER

TRUONG, LECHI

ART UNIT	PAPER NUMBER
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2194

MAIL DATE	DELIVERY MODE
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01/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/068,295

Applicant(s)

MITCHELL ET AL.

Examiner

LeChi Truong

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

*[Signature]*  
SUPERVISOR, PATENT EXAMINER

**DETAILED ACTION**

1. Claims 1-22 are presented for the examination

**Claim Rejections - 35 USC § 102**

2. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Bhat (US. Patent 6,097,955).

3. As to claim 1, Bhatt teaches message (message, cool 2, in 25-30/col 4, in 10-20/ col 6, ln 46-55), asserting whether the message is in a selected application format (col 6, ln 50-55), selected application (the radio cluster servers 220-222, col 4, ln 39-45/ col 6, ln 50-49), a next location (another system node, cool 3, ln 59-62), a next location (communication module 320, col 6, ln 63-67/ Fig. 3), if the message is not in the selected application format (Paging message, col 6, ln 63-67/ col 2, ln 25-30), if message is not in the selected application format: routing the message to a next location( col 6, 63-67 ), a selected application processor( the radio server 322-324 may be implemented as individual hardware units such as data processors, col 6, ln 15-17),if the message is in the selected application routing the message to a selected application processor( col 6, ln 50-55), processing the message by the selected application processor( col 6, ln 55-60), routing the message to the next location( col 6, ln 55-62).

4. Claims **2-6, 19-21** are rejected under 35 U.S.C. 103m(a) as being anticipated by Bhat (US. Patent 6,097,955), as applied to claim 1 above, and further in view of Rosenberg et al (US. Patent 6,560,450 B1).

**As to claim 2**, Bhat does not teach a message as packet. However, Rosenberg teaches the message includes receiving a packet (col 4, ln 48-52).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Bhat to incorporate the feature of packet because this provides the simple determination of the direction in which that packet should be routed over the network.

**As to claim 3**, Rosenberg teaches the packet from a network (col 2, ln 37-40).

**As to claim 4**, Rosenberg teaches the packet from a switched network (col 1, ln 19-22/ col 10, ln 32).

**As to claim 5**, Rosenberg teaches the internet (col 1, ln 29-31).

**As to claim 6**, Rosenberg teaches the message is encrypted (col 5, ln 54-57); processing the message by the selected application processor includes decrypting the message by the selected application processor (col 5, ln 54-58).

**As to claims 19, 20, 21**, they are apparatus claims of claims 1, 2 and 6; therefore, they are rejected for the same reasons as claims 1, 2 and 6 above.

5. Claims **7-12, 14, 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Shanklin et al (US. Patent 6,578,147 b1).

As to **claim 7**, Rosenberg teaches a network (networks, col 2, ln 37-38), a fabric configured for communication (col 6, ln 52-56), a plurality of application service devices (satellite nodes 11, col 4, ln 48-52), unprocessed application specific message (packet, col 5, ln 52-58), the plurality of application service devices are configured to receive a plurality of unprocessed application specific message (col 4, ln 45-48), a particular application (the terminals at the edges of the satellite, col 5, ln 55-58/ Each packet is provided with a header incorporating a destination address which is read or decoded by a satellite node, col 4, ln 47-50), the application specific message (the packet contain a header which includes a destination address and a sequence filed. The payload in the packet contains the encoded user data, which can be from any kind of multimedia service and can include, for example, voice, video, or data, col 5, ln 52-58), each unprocessed application specific message is configured to be processed by a particular application (col 5, ln 53-58/ col 10, ln 7-10/ ln 27-31), each unprocessed applications specific message is processed with the particular application for with it is configured (col 4, ln 48-52/col 5, ln 54-58/ col 6, ln 2-10/col 9, ln 59-63/ col 10, ln 27-31), a plurality of processed application-specific messages is produced( col 5, ln 56-57), service devices are configured to sent the each processed application specific message to the fabric( col 9, ln 59-63/col 10, ln 56-62).

Rosenberg does not explicitly teach process message in parallel. However, Shanklin teaches process message in parallel (the sensors operation in parallel and analyze packet to determine, col 2, ln 64-66).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg and Shanklin because Shanklin's process

message in parallel would determines if there is an attempt to gain unauthorized access to the network.

**As to claim 8**, Rosenberg teaches the message includes receiving a packet (col 4, ln 48-52).

**As to claim 9**, Rosenberg teaches a hardware state machine (col 10, ln 9-11).

**As to claim 10**, Shanklin teaches the plurality of application service devices is included in a single integrated circuit (col 6, ln 65-67).

**As to claim 11**, Shanklin teaches each application service device comprises a simple programmable processor (col 10, ln 7-8).

**As to claim 12**, Shanklin teaches a plurality of interoperable configured distinct physical devices (col 9, ln 5-6).

**As to claim 14**, Shanklin teaches an unprocessed application stream (col 5, ln 56-61).

**As to claim 16**, Shanklin teaches an e-mail transfer (col 5, ln 3-5).

**As to claim 17**, Shanklin teaches a virtual private networking communication (col 1, ln 15-17).

**As to claim 18**, Shanklin teaches a TPC offload engine communication (col 5, ln 63-64).

6. Claims 13, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al (US. Patent 6,560,450 B1) in view of Shanklin et al (US. Patent 6,578,147 b1) and further in view of TB (Troubleshooting).

**As to claim 13**, Rosenberg, Shanklin do not teach SSL/TLS. However, TB teaches SSL/TLS (SSL/TLS, page 2, ln 12).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rosenberg, Shanklin and TB because TB's SSL/TLS would improves performance of Rosenberg, and Shanklin's systems by allowing the requirement for implementing encryption acceleration hardware.

**As to claim 15**, TB teaches an SSL/TLS connection between a web browser and a web server (page 4, ln 22-25).

8. Claim **22** is rejected under 35 U.S.C. 103(a) as being anticipated by Bhat (US. Patent 6,097,955) in view of Rosenberg et al (US. Patent 6,560,450 B1) and further in view of Muthukumar et al (US. Patent 6,820,250 b2).

**As to claim 22**, Bhat and Rosenberg do not teach the first/second iteration, a pipeline. However, Muthukumar teaches iteration, a pipeline (the first iteration, last iteration, the software pipeline, col 2, ln 64-67).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Bhat and Rosenberg with Muthukumar to incorporate the feature of iteration, a pipeline because this allows the system to improve the performance of software pipelined loops.

**Response to the argument**

29. Applicant amendment filed on 11/14/2007 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) “ is not free to designate another element, such as the radio cluster server 322-324 or elements hereof, as the application processor ”.

(2) “ nothing in Rosenberg et al. indicates that the packets described therein are configured to be processed only by the particular set of software installed on a particular edge terminal”.

(3) “the packets would not be “application-specific” as that term is used in the claim”.

(4) “ Once the download operation is complete, the message processed by the edge terminal is not returned to the satellite node”

30. Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Bhat teaches the radio cluster servers 322-324 are software modules within the CPU of the application processors 302( col 6, 13-15).

As to the point(2), Rosenberg teaches Each packet is provided with a header incorporating a destination address which is read or decoded by a satellite node, col 4, ln 47-50), the terminals at the edges of the satellite network carry out the coding and decoding of this data, (col 5, l 55-58). Each decoding of a satellite node within the satellite nodes is a partuculler application which is used to process the message.



As to the point(3), Rosenberg teaches Each packet is provided with a header incorporating a destination address, col 4, ln 47-50/ the packet contain a header which includes a destination[application]address and a sequence filed. The payload in the packet contains the encoded user data, which can be from any kind of multimedia service and can include, for example, voice, video, or data (col 5, ln 52-58). Since the packets contain information from the specific application, the packets are application-specific messages.

As to point (4), Rosenberg teaches the functions carries out by the cell are: generation of packets, shaping and addressing of packets, transmission of packets to the satellite, reception of packets from the satellite, and analysis and generation of statistics of received packets (col 9, ln 52-57), the switch on-board [fabric] is connected to receivers and transmitter for the communication with cells by the up-links and down links (col 10, ln 37-40).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

May 12, 2006

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER